March 12, 1953

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Shelocad for your files is the original copy of our Annual Technical Report on the use of the side-bone delay instrument as an interrogational device. Also enclosed for your file is a report on instrumentation for this project from

Also included in this folder are duplicates of both reports, which procedure you requested in your letter to us dated February 20, 1953.

On March 5, 1953, the newest instrument developed by

was delivered. It appears to be much
more refined and to have greater durability than the previous instru-

Very brilly game,

Enclosures

ANNUAL T. CHIEGAL PEPCIAT

March 9, 1953

The primary aim and purpose of this project is to obtain a successful interrogational device from the effects of side-tone delay, together with an empropriate procedure for its use with a minimum amount of attachments.

The secondary aim, being developed in this laboratory, is to obtain more easily interpreted polygraph records by use of side-tone delay in conjunction with the polygraph.

It was first believed that the general effect of delaying the side-tone on a subject was to retard his speech and cause a variance in his vocal intensity. This belief was based upon the findings of previous experimenters. It was found at this I borstory that this phenomenon only occasionally occurred. It is thought by these investigators that the amount of difficulty experimened by the subject might be based upon his aducation and/or intelligence. In most cases it appears that the more education and higher intelligence a subject has the greater difficulty he will experience with the effect. However, whether the subject experienced this phenomenon or not seemed unrelated

e.g. "Delayed side-tone typically reduces rate and increases the sound pressure level of speech." "The Sifect of Delayed Side-Tone upon Vocal Fite and Intensity, "Y Journal of Speech and Hearing Disorders, 16, 1951, 59-60.

to whether a confession later resulted. Because of this, these investigators recently have not been too concerned about theeffects of the side-tone delay on the subject, but rather they have been concentrating on the procedures which will more easily and readily induce the confession.

The success of the side-tone delay (STD) instrument is mainly dependent upon two things - the interregator and his procedure. No instrument or device can fulfill the basic requirement of a good interregator and he must have a suitable procedure(s) to use with the STD instrument.

In these investigators! first thrus report six different procedures here set forth. Ance then these procedures have been further experimented with and utilized. They are now again set forth along with a statement as to their practicability.

A. Polygraph first used by itself to determine actual points of deception. Tide-tone delay then used at points of deception, as determined from the polygraph, by manual manipulation of the off-ind-on side-tone delay switch.

reasons. First, the interrogator must usually know thether the subject is guilty or concealing information about the matter under investigation. Therefore, it is usually imperative that a competent polygraph examiner conduct this tosts first. However, in a few cases it can be assumed

that the subject is lying if he is implicated in a trustworthy confession against interest by one of his co-defendants, or when the subject is a prisoner of war. In this latter case, the subject is probably withholding information about his equipment, deployment of his fellow troops, and other information that is of value to an intelligence section.

The second value of using this procedure in that the STP is introduced after the polygraph, therefore, the interrogator's psychological position is greatly strongthened just as the interrogation begins.

- 3. Use of Side-Tone Pelay and Polygraph Jointly.
- 1. "Manually manipulating "The witch at points of possible deception while the polygraph is in actual operation. This method has been found to be only of value when used for its psychological effect. This is because the resulting polygraph records are too distorted for a correct interpretation, therefore, the examiner must assume beforehind that the subject is lying about the matter under investigation."

That was originally stated about this procedure, i.c., it has value only as a psychological device, still amplies.

2. "Mide-Tone delay in operation throughout the polygraph tests." Thismethod is the most effective if the STD and polygraph are to be in operation simultaneously. Usually the records are not too distorted for interpretation, in fact, sometimes the records

are believed to be more easily interpreted because of the use of the side-tone delay.

- C. Use of 'ide-Tone Delay Alone for Interrogational Purposes.
- 1. "Manual manipulation of STD switch during the interrogation at points of possible deception."
- 2. "Turing the interrogation, while the STD is operating, the subject is allowed to interrupt in order to rake his denials. The examiner may then call the subject to task for his falling to express himself without stuttering and/or hesitation."
- 3. "The CTD operating continuously and purely as an interrogational device, without any other attachments or devices. The examiner uses the technique here of immediately stopping the subject from fully discussing the case while an ampeal for the truth is made by the examiner. Then this appeal appears to change the tener of the subject's denials, he is then allowed to make any explanation regarding his position in the case. In doing so he will experience difficulty due to the effects of the CTD. When this difficulty is trought to the subject's attention it will naterially sid in obtaining admissions against interest..."

Of the above procedures, C-1 and 3 appear to be the most effective.

However, the interrogator who uses the C-1 procedure is at a great disadvantage in that the FTD must be in operation each time the subject lies.

This necessitates second-guessing on the part of the OTD operator.

The interrogator who uses the C-3 procedure is at a disadvantage when the customary alcrophene is used. This is because not only the subject's own talk but also the interrogator's talk is delayed to the subject through his earphones. This is construed by some subjects as a warning that something is makes and that they should be very careful of what they tell the interrogator.

An was stated previously in this report, these investigators feel that usually the subject's guilt or innocence is generally not known, unless he had been examined by the polygraph technique of detecting deception. Therefore, sections 5-1, 2 and 3 may be utilized without the use of the polygraph. If any of these three procedures are used, the interrogator must be expertly trained in order to obtain sabisfactory results.

Since the last Status Report (January 19, 1953), 18 court subjects have been experimented with at this laboratory. However, of these only three have been experimented with since February 5, 1953 because

vacation. It is expected that this laboratory's case load will sucstantially increase with his return on March 16, 1953. The results of these 18 sucjects are as follows in Tables 1 and 2:

A. Table 1. Outcome of the Examinations

	White	Colored
Innocent	6	6
Juilty	3 (2 cen- fessions)	3 (1 con- fession)
Indefinite	0	0

* As determined by the _ _ Polygraph and/or full confessions.

B. Table 2. Di ficulty Talking While STD Operating **

	White	Colored
Innocent	3 Fours, 1 Three, 2 Twos	1 Four, 4 Twos, 1 (me
Guilty	2 Fours (1 conf.) 1 Three (Conf.)	2 Twos (1 Conf.) 1 One
Indefinite	None	None

*aCcale of Mifficulty Talking.

Five -- Very great difficulty

Four -- Great difficulty

Three -- Some difficulty

Two -- Very little difficulty

One -- No apparent difficulty

C. Table 3. Total Results of Outcome of the Examinations.

	White	Colored
Innocent	12	18
Guilty	4 (3 Conf.)	9 (4 Conf.)
Indefinite	· 0 =	1

D. Table L. Total Results of Difficulty Talking While STD Operating.

	Uhi te	Colored
Innocent	5 Fours, 1 Three, 5 Tows, 1 One	3 Fours, 3 Threes, 7 Twos, 5 Ones
Guilty	2 Fours (1 Conf.) 1 Three (Conf.) 1 Two (Conf.)	1 Four (Conf.), 1 Three, 3 Twos (2 Conf.), 4 Ones (1 Conf.)
Indefinite	None	1 Two

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laboratory but then have refused to be examined. Furing this same period time was arranged and set acide for the examination of 17 subjects who failed to appear or concel their appointments.

These investigators believe that no definite conclusion as to the value of the STD instrument can be determined at this time. It is hoped that by the end of this contract, May 71, 1953, an opinion can be given. However, several opinions can be now expressed.

One of those opinions is that the better interrogator will obtain better results with the use of the STD than the average or poor interrogator. It is analogous to a new type of golf putter which the manufacture claims as the solution of every polfer's putting troubles. The crofessional who uses it all still subtreated with it than the duffer who plays once a month,

Another opinion is that the examiner must usually first know whether the subject is guilty and/or conceding information about the mitter under investigation, or whether the subject is inducent. For these experiments this was usually determined by use of the Polygraph. Otherwise, the interregator the only utilizes the TTP will usually gave such difficulty in dacking if the subject is telling the truth or if no is lying.

It is also believed that no false confensions or definisions against interest will result from insecent persons when the STD instrument is properly utilized. Almost every subject considered innocent by the use of the liedetector was interregated with the STD to determine if its use would cause a false confension. Not one of these innocent subjects made an admission against interest.

Although no innocent person admitted any guilty knowledge, many jurists are not to entagorize its use as durses and/or inherent coercion which is prohibited by the lith Amendment to the United States Constitution. For this reason extreme care should be exercised when subjecting citizens of the United States to the STD technique even when they voluntarily consent to be examined. For this and other important reasons, every interrogator must be very familiar with the laws governing criminal interrogation.

The following is a list of all professional personnel employed part-time or full time on this project since its inception:

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